Yard-Man



Summer



Winter



OUTDOOR POWER EQUIPMENT for all seasons

Spring

Owner's

Manual



- **ASSEMBLY**
- **OPERATION**
- MAINTENANCE

Thank you for purchasing an American-built product.

HYDROSTATIC TRACTORS

Model Series 834

IMPORTANT!

Record the exact Model No. and Serial No. which appear on the frame of your unit (under the seat) in the space below. You must have these numbers, along with the date of purchase, in order to receive warranty or service.

MODEL NO.	SERIAL NO.
14 834 401	

IMPORTANT:

Read Safety Rules and Instructions Carefully

WARNING: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 368022, Cleveland, Ohio 44136-9722.

FORM NO. 770-8623L PRINTED IN U.S.A.

IMPORTANT

SAFE OPERATION PRACTICES



THIS SYMBOL POINTS OUT IMPORTANT & AFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. WHEN YOU SEE THIS SYMBOL— HEED ITS WARNING.



DANGER:

Your lawn mower was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in injury. This lawn mower is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

I. GENERAL OPERATION

- Read, understand, and follow all instructions in the manual and on the machine before starting. Keep this manual in a safe place for future and regular reference and for ordi ring replacement parts.
- Only allow responsible individuals familiar with the instructions to operate the machine. Know controls and how to stop the machine quickly.
- Do not put hands or feet under cutting deck or near rotating parts.
- 4. Clear the area of objects such as rocks, toys, wir, etc., which could be picked up and thrown by the blade. A small object may have been overlooked and could be accidentally thrown by the mower in any direction and cause injury to you or a bystander. To help avoid a thrown objects njury, keep children, bystanders and helpers at least 75 f et from the mower while it is in operation. Always wear safe y glasses or safety goggles during operation or while pe forming an adjustment or repair, to protect eyes from foreign objects. Stop the blade(s) when crossing gravel drives, walks or roads.
- Be sure the area is clear of other people before n owing. Stop machine if anyone enters the area.
- Never carry passengers.
- Disengage blade(s) before shifting into reverse and backing up. Always look down and behind before and while backing.
- 8. Be aware of the mower and attachment discharge lirection and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the chute guard in place.
- Slow down before turning. Operate the machine smoothly. Avoid erratic operation and excessive speed.
- Never leave a running machine unattended. Always turn off blade(s), place transmission in neutral, set park brake, stop engine and remove key before dismounting.
- 11. Turn off blade(s) when not mowing.
- 12. Stop engine and wait until blade(s) comes to a ci mplete stop before (a) removing grass catcher or unclogging thute, or (b) making any repairs, adjusting or removing any grass or debris.
- 13. Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- 15. Watch for traffic when operating near or crossing Loadways.
- 16. Use extra care when loading or unloading the machine into a trailer or truck. This unit should not be driven up or down a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually on a ramp to load or unload property.
- 17. Never make a cutting height adjustment while engine is running if operator must dismount to do so.
- 18. Wear sturdy, rough-soled work shoes and close- itting slacks and shirts. Do not wear loose fitting clothes or j. welry. They can be caught in moving parts. Never operate a unit in bare feet, sandals, or sneakers.
- 19. Check overhead clearance carefully before driving inder power lines, wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other sit ation where

- the operator may be struck or pulled from the unit, which could result in serious injury.
- Disengage all attachment clutches, thoroughly depress the brake pedal, and shift into neutral before attempting to start engine.
- 21. Your mower is designed to cut normal residential grass of a height no more than 10". Do not attempt to mow through unusually tall, dry grass (e.g., pasture) or piles of dry leaves. Debris may build up on the mower deck or contact the engine exhaust presenting a potential fire hazard.

A

SLDPE OPERATION

Slopes are a major factor related to loss of control and tip-over accidents which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.

DO:

Mow up and down slopes, not across.

Remove obstacles such as rocks, limbs, etc.

Watch for holes, ruts or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.

Use slow speed. Choose a low enough gear so that you will not have to stop or shift while on the slope. Always keep machine in gear when going down slopes to take advantage of engine braking action.

Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability.

Use extra care with grass catchers or other attachments. These can change the stability of the machine.

Keep all movement on the slopes **slow** and **gradual.** Do not make sudden changes in speed or direction. Rapid engagement or braking could cause the front of the machine to lift and rapidly flip over backwards which could cause serious injury.

Avoid starting or stopping on a slope. If tires lose traction, disengage the blade(s) and proceed slowly **straight** down the slope.

DO NOT:

Do not turn on slopes unless necessary; then, turn slowly and gradually downhill, if possible.

Do not mow near drop-offs, ditches or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.

Do not mow on wet grass. Reduced traction could cause sliding.

Do not try to stabilize the machine by putting your foot on the ground.

Do not use grass catcher on steep slopes.

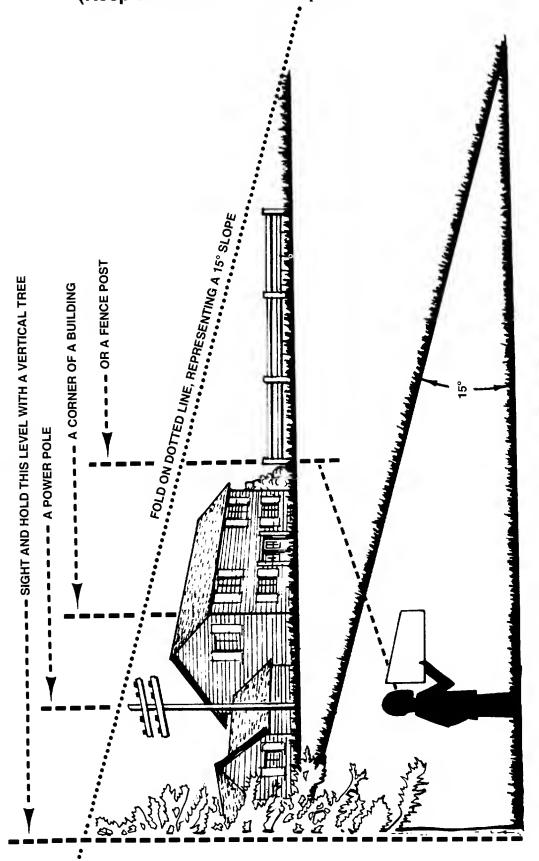
III. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. **Never** assume that children will remain where you last saw them.

(continued on page 5)

SLOPE GAUGE

(Keep this sheet in a safe place for future reference.)



Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2-1/2 feet every 10 feet). A riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it is extremely difficult to maintain your footing and you could slip, resulting in serious injury.

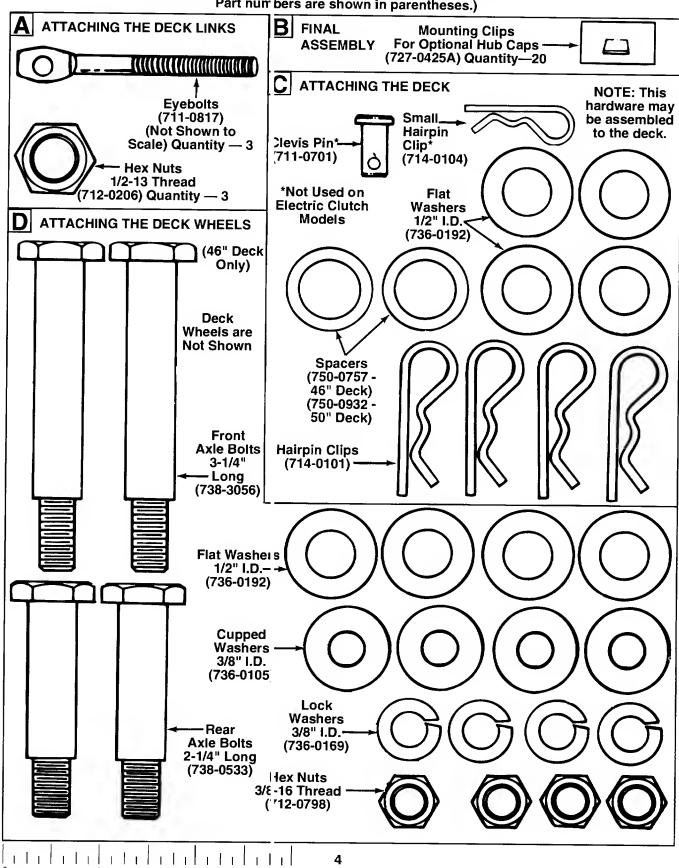
WARNING

Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes. Operate RIDING mowers up and down slopes, never across the face of slopes.

CONTENTS OF HARDWARE PACK

Remove this sheet from your owner's manual and lay the hardware on the illustration for identification purposes. After assembly, keep the Slope Gauge which is on the reverse side of this sheet for future use.

(Hardware pack may contain extra items which are not used on your unit. Part numbers are shown in parentheses.)



- Keep children out of the mowing area and in watchful care of an adult other than the operator.
- 2. Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.
- 4. Never carry children. They may fall off and be seriously injured or interfere with the safe machine operation.
- Never allow children under 14 years old to operate the machine. Children 14 years and over should only operate machine under close parental supervision and proper instruction.
- Use extra care when approaching blind corners, shrubs, trees or other objects that may obscure your vision of a child or other hazard.
- 7. Remove key when machine is unattended to prevent unauthorized operation.



IV. SERVICE

- 1. Use extreme care in handling gasoline and other fuels. They are extremely flammable and the vapors are explosive.
 - a. Use only an approved container.
 - Never remove fuel cap or add fuel with the engine running.
 Allow engine to cool at least two minutes before refueling.
 - c. Replace fuel cap securely and wipe off any spilled fuel before starting the engine as it may cause a fire or explosion.
 - Extinguish all cigarettes, cigars, pipes and other sources of ignition.
 - Never refuel the machine indoors because fuel vapors will accumulate in the area.
 - f. Never store the fuel container or machine inside where there is an open flame or spark, such as a gas hot water heater, space heater or furnace.
- 2. Never run a machine inside a closed area.
- To reduce fire hazard, keep the machine free of grass, leaves or other debris build-up. Clean up oil or fuel spillage. Allow machine to cool at least 5 minutes before storing.
- Before cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the spark plug to prevent accidental starting.

- Check the blade and engine mounting bolts at frequent intervals for proper tightness. Also, visually inspect blade for damage (e.g., excessive wear, bent, cracked). Replace with blade which meets original equipment specifications.
- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- Never tamper with safety devices. Check their proper operation regularly. Use all guards as instructed in this manual.
- After striking a foreign object, stop the engine, remove the wire from the spark plug and thoroughly inspect the mower for any damage. Repair the damage before restarting and operating the mower.
- Grass catcher components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. For your safety protection, frequently check components and replace with manufacturer's recommended parts when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves and use extra caution when servicing blade(s).
- Check brake operation frequently. Adjust and service as required.
- 12. Muffler, engine and belt guards become hot during operation and can cause a burn. Allow to cool down before touching.
- 13. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
- Observe proper disposal laws and regulations. Improper disposal of fluids and materials can harm the environment and the ecology.
 - a. Prior to disposal, determine the proper method to dispose of waste from your local Environmental Protection Agency. Recycling centers are established to properly dispose of materials in an environmentally safe fashion.
 - b. Use proper containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them. Properly dispose of the containers immediately following the draining of fluids.
 - c. DO NOT pour oil or other fluids into the ground, down a drain or into a stream, pond, lake or other body of water. Observe Environmental Protection Agency regulations when disposing of oil, fuel, coolant, brake fluid, filters, batteries, tires and other harmful waste.







WARNING — YOUR RESPONSIBILITY

Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

UNPACKING

TO REMOVE UNIT FROM CRATE

- 1. Remove all screws from the top of the crate using a 1/4" hex head socket or a flat blade screwdriver.
- 2. To remove ends, grasp top board on the end, and pull towards you in a downward motion.
- Set panel aside to avoid tire punctures.
- 4. Repeat procedure for each side of the crate.
- 5. Remove and discard plastic bag which covers unit.
- Loose parts (may include the owner's guide, steering wheel, battery fluid, chute deflector, etc.) are on the seat and wrapped in plastic. Carefully cut and remove the plastic wrap. Remove loose parts from the seat.
- Remove the deck from beneath the tractor. Make certain brake is released, and push the unit off the skid.
- 8. Remove page four from this manual and lay out the contents of the hardware pack according to the illustration for identification.

ASSEMI3LY INSTRUCTIONS

BATTERY INFORMATION



WARNING

- A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (gogg les, rubber gloves and apron) when working with it.
- B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical at ention.
- C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of a nmonia/ water or baking soda/water.
- D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.
- E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.
- F. Keep all lighted materials (cigarettes, niatches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.
- G. As a further precaution, only charge the tattery in a well-ventilated area.
 - *Always shield eyes, protect skin and :lothing when working near batteries.



DANGER

Battery contains sulfuric acid. Refer to warning above. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of witter or milk. Follow with milk of magnesia, beaten eggs or vegetable oil. Call physician immediately. EYES: Flush with cool water for at least 15 minutes, then get prompt medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge pattery only in well-ventilated areas. Make certain renting path of battery (drain tube) is always open.

KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!

IMPORTANT: After assembly, service engine with gasoline, and check oil level as instructed in the separate engine manual packed with your unit.

NOTE: Reference to right or left hand side of the unit is observed from the driver's seat, facing forward.

TOOLS REQUIRED FOR ASSEMBLY

- (1) 1/4" socket wrench or flat blade screwdriver
- (1) 1/2" wrench or socket wrench
- (1) 9/16" wrench or socket wrench
- (2) 7/16" wrenches or socket wrenches
- (1) Pair of pliers

ACTIVATING AND CHARGING THE BATTERY

Do not activate battery (fill with battery acid) until battery is actually placed in service. Be certain to read previous warnings before activating the battery.

- Lift the hood of the tractor. Remove the wing nuts from the hold-down rods which secure the battery cover to the battery. Refer to figure 14 on page 11. Remove the battery cover. Disconnect the positive cable from the positive terminal. Save the hardware.
- Remove the battery from the tractor, paying attention to how the battery is placed in the unit, and how the drain tube (attached to the battery) is routed.
- 3. Activate the battery as instructed in the "Quick Start" brochure included with the battery fluid. Read instructions carefully.

NOTE: You can continue assembling the lawn tractor while battery is standing for 30 minutes (after filling with acid), and later while you are charging the battery.

IMPORTANT: To obtain the maximum life from your battery, it MUST BE CHARGED prior to initial use.

<u>CHARGE THE BATTERY</u> after the 30 minute standing period. Use a 12-volt automotive type battery charger to charge the battery at 6 AMPS for one hour before installation.

NOTE: If you charge the battery at a lower AMP rate, use a hydrometer to make sure the battery is completely charged. The hydrometer should read 1.260 minimum. DO NOT CHARGE AT MORE THAN 6 AMPS.

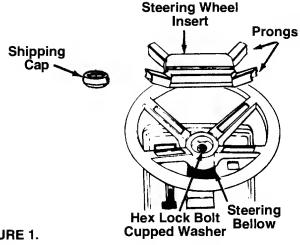


FIGURE 1.

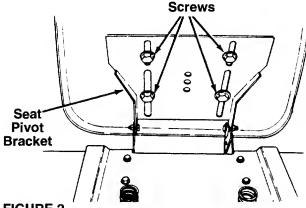
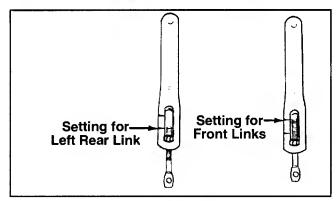
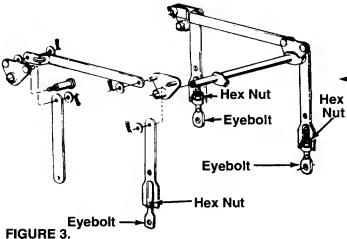


FIGURE 2.





STEERING WHEEL INSTALLATION (Hardware A)

- 1. The hardware for attaching the steering wheel has been packed inside the steering wheel. Carefully pry off the shipping cap and remove the hardware. Discard the shipping cap.
- 2. Remove the steering bellow from the lift lever on the right hand side of tractor. Place steering bellow over the steering shaft extending through the dash. See figure 1.

NOTE: If the openings on each end of the steering bellow are two different sizes, the smaller end goes down against the dash of the tractor.

- 3. With the wheels of the tractor pointing straight forward, place the steering wheel over the steering shaft, positioning steering wheel as desired.
- 4. Place the washer with the cupped side down over the steering shaft. Secure with hex lock bolt. See figure 1.
- 5. Snap the steering insert over the four spokes of the steering wheel.

-SEAT ASSEMBLY

Remove the four screws from the bottom of the seat. Place the seat in position against the seat pivot bracket, lining up the slotted holes in the pivot bracket with the holes in the seat. Select desired position for the seat, and secure with the four screws. See figure 2.

ATTACHING THE DECK LINKS (Hardware A)

The three adjustable deck links have been shipped unassembled. Attach as follows.

- 1. Start 1/2" hex nuts on eyebolts provided. Insert the hex nuts and eyebolts into the adjustable lift links as shown in figure 3.
- 2. Thread eyebolts into the lift links and hex nuts. The left rear link should be adjusted so the evebolt is to the lower mark as shown. The two front links should be adjusted to the higher mark.

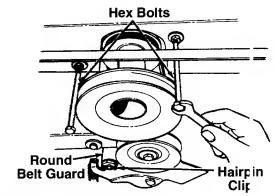


FIGURE 4.

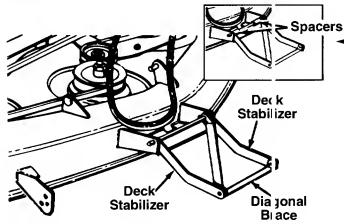


FIGURE 5.

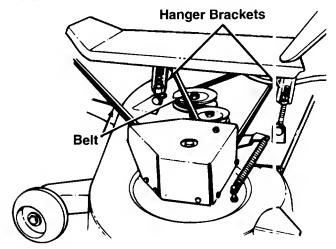


FIGURE 6.

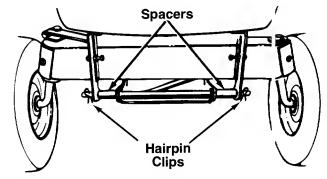


FIGURE 7.

ATTACHING THE CUTTING DECK (Hardware C) NOTE: Disregard steps 1, 9 and 11 on model 146Y834P.

- Models 1463834H and 146W834H: Working beneath the tractor, remove the round belt guard from the idler by removing the hairpin clip. See
 figure 4. Remove the two hex bolts which act as belt keepers by the engine pulley.
- 2. Move the tractor lift handle all the way back to the full raised position. Turn the tractor steering wheel all the way to the left.
- The two deck stabilizers and the diagonal brace which are attached to the front of the deck are folded back over the deck for shipping purposes.
 Unfold them at this time. See figure 5.

NOTE: If the hardware for attaching the deck is assembled to your deck, remove the hairpin clips and flat washers from each deck bracket. Remove the spacers from the rod which is through the deck stabilizer by removing the hairpin clips and sliding out the rod. Replace the rod and hairpin clips. See figure 5, inset.

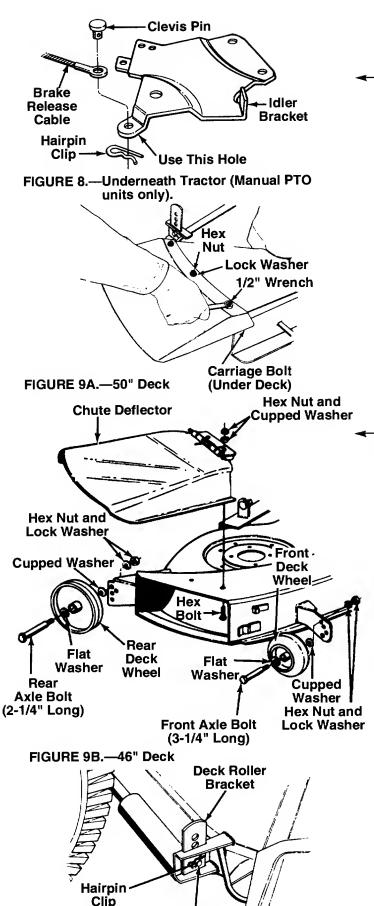
- 4. Slide the deck under the tractor from the right side as you lift the stabilizers and diagonal brace over the right front wheel.
- Move tractor lift handle forward to the lowest position.
- 6. Attach the four tractor hanger brackets to the deck as follows. The left front tractor hanger bracket goes through the center of the V-belt.
 See figure 6. Attach the rear hanger brackets first, then the front, using four flat washers and hairpin clips.
- Disassemble the front cross bar from the tractor by removing two hairpin clips. Use the cross bar to attach the deck stabilizers, the diagonal brace and two spacers to the tractor frame.

46" Deck: Use the rear set of holes.

50" Deck: Use the forward set of holes.

Secure with the two hairpin clips just removed. - See figure 7.

- 8. Place the deck belt around the engine pulley and idler pulley.
- Models 1463834H and 146W834H: Replace the round belt guard by the idler pulley (hex side down). Replace the hex bolts (belt keepers) by the engine pulley. Refer to figure 4.
- 10. Check all belt guards for clearance. The belt guards must be between 1/16" and 1/8" away from the belt when the PTO lever or switch is in the engaged or on position (be certain to disengage the PTO lever after checking).



Clevis Pin

FIGURE 10.-50" Deck Only

11. Models 1463834H and 146W834H: Secure the brake release cable to the tractor idler bracket with clevis pin and small hairpin clip, using the hole in the idler bracket as shown in figure 8.

ATTACHING THE CHUTE DEFLECTOR



WARNING: Do not operate the tractor unless the chute deflector has been properly installed.

Remove the bolts, nuts and cupped washers which are attached to the deck next to the chute opening. Place the chute deflector in position as shown in figure 9. Secure with hardware just removed.

ATTACHING THE DECK WHEELS (Hardware D) (46" Deck Only)

Attach the wheels to the deck as follows. All wheels must be placed in the same relative position.

Front Wheels: Front axle bolts are the longer bolts. Front deck wheels have a rounded surface.

Rear Wheels: Rear axle bolts are the shorter bolts. Rear deck wheels are flatter.

Place flat washer 1/2" I.D. on axle bolt, then the deck wheel and cupped washer (crowned side of washer goes against the wheel). See figure 9. Secure to deck with lock washer and hex nut. Tighten securely. Assemble remaining wheels in same manner.

ATTACHING THE DECK ROLLER

(50" Deck Only)

Remove the hairpin clips and clevis pins from each end of the deck roller. Insert the deck roller brackets up through the brackets provided on the rear of the deck. Attach with clevis pins and hairpin clips just removed, using the same hole location on each side of the deck. See figure 10.

TIRE PRESSURE

The tires on your unit may be over-inflated for shipping purposes. Reduce the tire pressure before operating the unit. Recommended operating tire pressure is approximately 12 p.s.i.

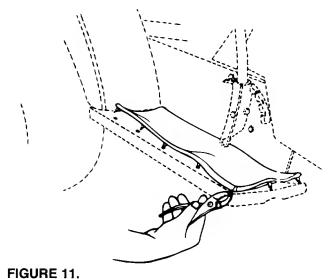


WARNING: Maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

LEVELING THE DECK

After attaching the deck to the tractor, check to be certain it is adjusted properly.

- 1. Check tire pressure in all four tires. Recommended pressure is 12 p.s.i.
- Make certain all deck wheels or both ends of the deck roller are mounted in same relative hole locations.



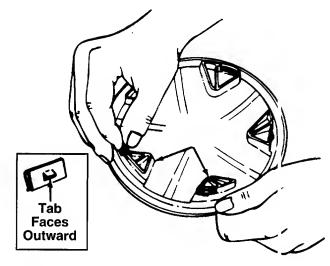


FIGURE 12.

Positive (+)
Red Terminal
Positive (+)
Cable

Negative (-)
Terminal

Black
Negative
FIGURE 13. (-) Cable

- 3. Place the tractor on a level surface.
- 46" Deck: Lower the deck until it reaches the ground. All four deck wheels should reach the ground at the same time.
- 5. **Both Decks:** Place the deck approximately 1" above the ground. Check to be certain the distance from the bottom edge of the deck to the ground is the same on both sides of the deck.

If adjustment is necessary, adjust the deck links on the left side of the deck as follows.

- Make certain the PTO is disengaged. Remove the hairpin clip and washer from the weld bolt. Thread eyebolt up or down the link as necessary, and reassemble.
- 2. Check to be certain the front of the deck is 1/4" to 3/8" lower than the rear of the deck. If it is not, adjust the two front links to obtain this distance.

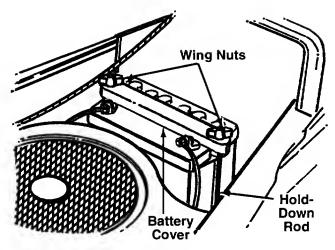
FINAL ASSEMBLY (Hardware B)

- If not already assembled, attach foot pads as follows. Position one foot pad on top of the running board on the tractor, lining up the studs on the bottom of pad with the holes in the running board. Pull the studs through the holes in the running board using a pair of pliers. Repeat on other side of tractor. See figure 11.
- 2. Attach the four hub caps as follows.
- a. Slide five mounting clips on each hub cap as
 shown in figure 12, with the tabs on the mounting clips facing outward.
 - b. Line up hub caps with wheel rims. Push hub caps on by hand.
- 3. Make certain **all** nuts and bolts are tightened securely.

INSTALLING THE BATTERY

NOTE: The positive battery terminal is marked Pos. (+). The negative battery terminal is marked Neg. (-).

- 1. Place the battery on the battery plate with the terminals toward the front of the tractor.
- Attach the positive cable (heavy red wire) to the positive battery terminal (+) with hex bolt and hex nut. See figure 13. Slide the rubber boot down over the positive terminal.
- Remove the hex bolt and nut from the negative cable. Attach the negative cable (heavy black wire) to the negative battery terminal (-) with the bolt and nut.



 Place the black plastic battery cover in position over the hold-down rods. Secure with wing nuts.
 See figure 14.

NOTE: It may be necessary to pull up on the hold-down rods in order to start the wing nuts.

FIGURE 14.

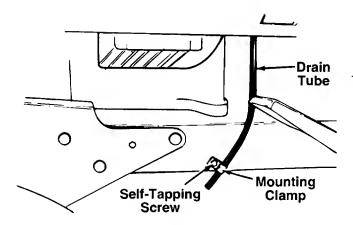


FIGURE 15.

5. Route the battery drain tube over to the left side of the tractor. Loosen the self-tapping screw which secures the mounting clamp. See figure
 15. Slip the end of the drain tube into the mounting clamp. Tighten the self-tapping screw to secure the clamp. Do not overtighten which could collapse the drain tube.

NOTE: The vented battery allows any gases or liquid from the battery to be drained onto the ground.

Trim end of drain tube if more than 1 inch extends below the frame.

SETTING THE CUTTING HEIGHT

Select the position for the tractor lift lever which gives the desired cutting height. Then move the deck roller or deck wheels to be 1/4 to 1/2 inches above the ground.

NOTE: To obtain the best, uniform cut, the deck is designed to be suspended from the tractor at the desired cutting height. The deck roller or deck wheels should be just off the ground, to smooth out the cut and guard against gouging.



WARNING: Keep hands and feet away from the chute area on cutting deck.

CONTROLS

IGNITION SWITCH

The ignition switch is located on the dashboa d. Turn the key to the START position to start the engine. When the engine is running, leave the key in the ON position. To stop the engine, turn the key to the OFF position. See figure 16.



WARNING: Remove the key from the tractor when the tractor is not in use to prevent accidental starting.

THROTTLE CONTROL

The throttle control is located on the left side of the dashboard and is used to regulate the engine speed. See figure 16. The engine should be operated from 3/4 to full throttle (FAST) when operating any equipment that uses the tractor engine as a source of power such as the mowing deck, snow thrower or rotary tiller.

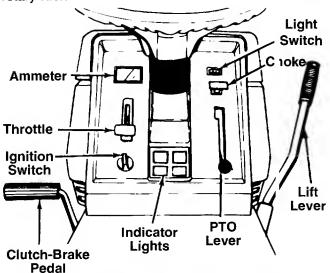


FIGURE 16A.—Models 1463834H and 146W 334H

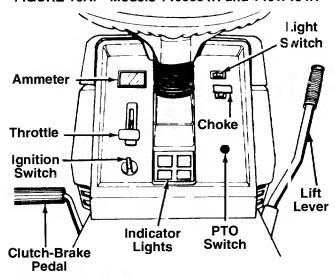


FIGURE 16B.—Model 146Y834P

CHOKE CONTROL

The choke control is located on the right side of the dashboard and is operated manually. Details for the choke operation are covered in the separate engine manual packed with your unit. See figure 16.

LIGHT SWITCH

The head lamps are operated by pushing the light switch located on the dashboard. The head lamps will only operate when the engine is running. See figure 16.

AMMETER

The ammeter registers the rate of battery charge or discharge. The ammeter will register on the discharging side when starting the engine. It should register on the opposite side (charging) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 16.

HYDROSTATIC CONTROL LEVER

The hydrostatic control lever is located on top of the fender on the left side of the tractor. This single control lever, connected to the hydrostatic transmission, controls both the speed and direction of the tractor. Infinite speed control is achieved by moving the control lever forward or backward. The farther forward or backward you move the control lever, the faster you will travel. Pulling the control lever into neutral (N) area will stop the tractor. To increase rear wheel torque (pulling power), move the control lever towards neutral (N) position. The lawn tractor responds similar to shifting to a lower gear with a gear type transmission. See figure 17.

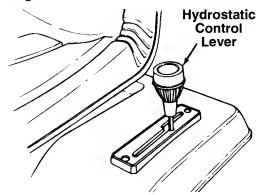


FIGURE 17.

CLUTCH-BRAKE PEDAL

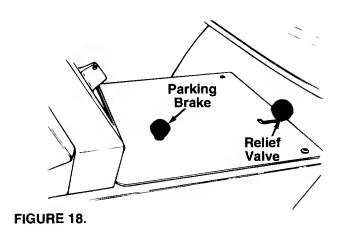
The clutch-brake pedal is located on the left side of the tractor. See figure 16. Depressing the pedal disengages the engine from the hydrostatic transmission and applies the brake.

NOTE: The clutch-brake pedal must be depressed to start the engine.

PARKING BRAKE

To set the parking brake, depress the clutch-brake pedal and pull up the parking brake knob. It will stay in the raised position. To release the parking brake, depress and release the clutch-brake pedal. See figure 18.

NOTE: The parking brake must be set if the operator leaves the seat with the engine running.



RELIEF VALVE

A hydrostatic relief valve is provided so the unit can be moved without the engine running. The lever which operates the relief valve is located on the console. See figure 18.

To operate the relief valve, place the hydrostatic control lever in neutral, release the parking brake, push the lever forward and to the right to lock. Be certain to release the lever by pushing it to the left before operating the engine.

LIFT LEVER

The five position lift lever is used to change the operating position of the attachments. To operate, pull the lever towards you. To release, move the lever to the right and then forward. See figure 16.

POWER TAKE-OFF (PTO) LEVER (Models 1463834H and 146W834H)

The PTO lever is located on the right side of the dashboard. The PTO lever is used to engage and disengage the power to the attachments. To engage the PTO, lift the lever slowly and lock it into the notch. See figure 16A.

NOTE: The PTO lever **must** be in the disengaged position (down) when starting the engine, when shifting into reverse and if the operator leaves the seat.

POWER TAKE-OFF (PTO) SWITCH (Model 146Y834P)

The PTO switch is located on the right side of the dashboard. See figure 16B. The PTO switch **must** be in the OFF position (down) when starting the engine, when shifting into reverse and if the operator leaves the seat.

To engage the PTO switch, pull knob out and lift up to ON position, then release. The knob will return to RUN position. See figure 19.

NOTE: The PTO switch **must** be in OFF position when starting the engine, when shifting into reverse and if the operator leaves the seat.

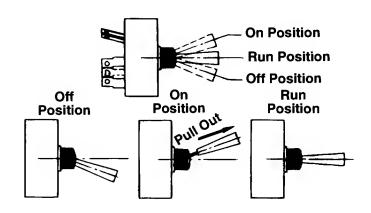


FIGURE 19.—Model 146Y834P Only

INDICATOR LIGHTS

The unit is equipped with three indicator lights, located on the dash panel. See figure 16. If a light illuminates when attempting to start the unit, proceed as follows:

CLUTCH—Depress the clutch pedal.

PTO—Disengage the PTO.

OIL—Check the crankcase oil level, and add oil as required.

OPERATION



WARNING

AVOID SERIOUS INJURY OR DEATH

- GO UP AND DOWN SLOPES, NOT ACROSS.
 AVOID SUDE EN TURNS.
- DO NOT OPERATE THE UNIT WHERE IT COULD SLIP OR TI?.
- IF MACHINE STOPS GOING UPHILL, STOP BLADE(S) \(\) ND BACK DOWNHILL SLOWLY.
- DO NOT MOW WHEN CHILDREN OR OTHERS ARE AROUNI.
- NEVER CARRY CHILDREN.
- LOOK DOWN AND BEHIND BEFORE AND WHILE BACKING.
- KEEP SAFETY DEVICES (GUARDS, SHIELDS, AND SWITCHES) IN PLACE AND WORKING.
- REMOVE OBJECTS THAT COULD BE THROWN BY THE BLAI E(S).
- KNOW LOCATION AND FUNCTION OF ALL CONTROLS.
- BE SURE BLADE(S) AND ENGINE ARE STOPPED BEFOR: PLACING HANDS OR FEET NEAR BLADE(S).
- BEFORE LEAVING OPERATOR'S POSITION, DISENGAGE BLADE(S), PLACE THE SHIFT LEVER IN NEUTRAL, ENGAGE BRAKE L)CK, SHUT ENGINE OFF AND REMOVE KEY.

READ OPERATOR'S MANUAL

GAS AND OIL FILL-UP

Check oil level and add if necessary. Service the engine with gasoline as instructed in the separate engine manual packed with your tractor. Read instructions carefully.

IMPORTANT: Your tractor is shipped with oil; however, you **must** check the oil level before cperating. Be careful not to overfill.

The gasoline tank is located under the seat. The filler neck is behind the seat. Do not overfill.



WARNING: Never fill fuel tank indoors, with engine running or while engine is hot.

HYDROSTATIC TRANSMISSION FLUID AND FILTER

Change hydrostatic transmission fluid and filter initially after 10 to 20 hours of operation, and every 200 hours of operation or once a year thereat:er.

OPERATING THE TRACTOR

IMPORTANT: This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the PTO lever or switch is in the disengaged or OFF position. In addition, the PTO lever or switch must be in the disengaged or OFF position when the unit is put into reverse or the engine will shut off. If the operator leaves the seat with the PTO engaged or ON and/or without setting the parking brake, the engine will shut off.



WARNING: Do not operate the tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

- Models 1463834H and 146W834H: Place the PTO lever in the disengaged (down) position.
 Model 146Y834P: Place the PTO switch in the OFF position.
- 2. Depress the clutch-brake pedal and set the parking brake.
- 3. Place the hydrostatic control lever in the NEUTRAL (N) position.
- 4. Set the throttle control in the FAST position.
- 5. Pull out the choke control. (A warm engine requires less choking.)
- 6. Turn the ignition key to the right to the START position. After the engine starts, release the key. It will return to the ON position.
- 7. Slowly push in the choke as the engine warms up.
- 8. Depress the clutch-brake pedal so the parking brake is released and then release the clutch-brake pedal.
- 9. Move the hydrostatic control lever forward. The farther forward you move the hydrostatic control lever, the faster you will travel.
- To stop the tractor, pull the hydrostatic control lever into NEUTRAL (N) or depress the clutchbrake pedal.
- To shut off the engine, turn the ignition key to the left to the OFF position. Remove the key to prevent accidental starting while equipment is unattended.

Be sure that the lawn is clear of stones, sticks, wire, or other objects which could damage lawn tractor or engine. For best results and to insure more even grass distribution, do not mow when lawn is excessively wet.



WARNING: Before leaving the operator's position for any reason, disengage the blades, place the shift lever in neutral, engage the parking brake, shut engine off and remove the key.

When stopping the unit to empty a grass bag, etc., follow the instructions above. This procedure will also eliminate "browning" the grass, which is caused by hot exhaust gases from a running engine.

IMPORTANT: If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

NOTE: If any problems are encountered, refer to the Trouble Shooting Guide on page 22.

GRASS COLLECTOR Model 190-083 is available as optional equipment for tractors with 46" decks only.



WARNING: The mower should not be operated without the entire grass catcher or chute deflector in place.

NOTE: Under normal usage bag material is subject to wear, and should be checked periodically. Be sure to use only factory authorized replacement bag.

ADJUSTMENTS



WARNING: Disconnect the spark plug wires and ground against the engine before performing any adjustments, repairs or maintenance.

SEAT ADJUSTMENT

To adjust the position of the seat, loosen the four screws on the bottom of the seat. See figure 2. Slide the seat forward or backward as desired. Retighten the four screws.

HYDROSTATIC NEUTRAL CONTROL ADJUSTMENT

The hydrostatic transmission control is in correct adjustment when the tractor does not move with the engine running, the clutch engaged and the hydrostatic control lever in the neutral position.

If adjustment is necessary, follow these steps:

- 1. Raise both rear wheels off the ground by placing blocks under the rear frame.
- 2. Remove the transmission panel by removing the parking brake knob and truss machine screws.
- 3. Loosen the hex jam nut on the speed selector adjusting rod. See figure 20.

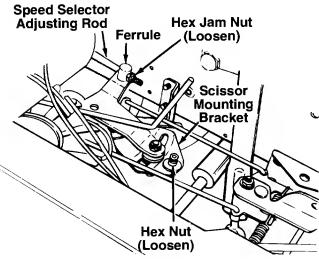


FIGURE 20.

- Loosen the hex nut on the scissor mounting bracket. See figure 20.
- 5. Start the engine and run at full throttle.
- Move the hydrostatic control lever until you find neutral (rear wheels do not rotate in either direction).



WARNING: Be careful of the cooling fan on the hydrostatic transmission.

- 7. Depress the clutch-brake pedal all the way and set the parking brake.
- 8. Shut off the engine.
- Tighten the hex nut on the scissor mounting bracket.
- Thread the speed selector rod in or out of the ferrule until the hydrostatic control lever lines up in the neutral position on the speed control index bracket.
- 11. Tighten hex jam nut against the ferrule.
- 12. Replace the transmission panel and parking brake knob.
- 13. Remove the blocks from under the frame and test the operation of the tractor.

DECK LEVELING ADJUSTMENT

If an uneven cut is obtained, the deck may be leveled by following instructions at end of assembly section.

STEERING SHAFT ADJUSTMENT

The steering shaft may be adjusted if there is too much play between the steering gear and segment. To adjust, loosen the hex bolt and nut on the front of the bearing retainer bracket. See figure 21. Pry the bearing retainer bracket toward the right until the steering gear engages solidly into the teeth of the steering segment. Retighten the hex bolt and nut.

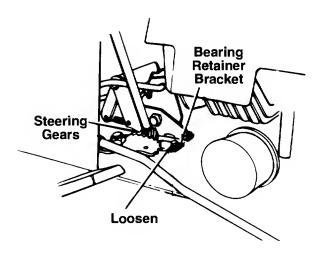


FIGURE 21.

BRAKE ADJUSTMENT (See figure 22)

The brake is located by the right rear wheel nside the frame. During normal operation of this machine, the brakes are subject to wear and will require periodic examination and adjustment.



WARNING: Do not adjust the brake while the engine is running. Be sure to block the wheels of the tractor before making the brake adjustment.

To adjust the brake, remove the cotter pin. Adjust the castle nut so the brake starts to engage when the brake lever is 1/4" to 5/16" away from the axle housing.

NOTE: Figure 22 is shown with the unit tipped up on rear wheels for clarity only.

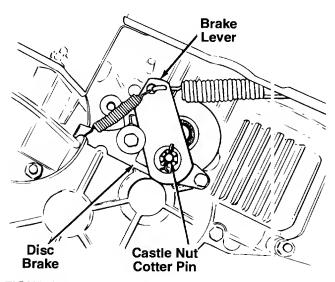


FIGURE 22.

CARBURETOR ADJUSTMENTS



WARNING: If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustments may be recuired to compensate for differences in fuel, temperature, altitude and load. Refer to separate engine manual for carburetor adjustment information.

NOTE: A dirty air cleaner will cause an engine to run rough. Be certain air cleaner is clean and attached to the carburetor before adjusting carburetor.

LUBRICATION



WARNING: Always stop engine and disconnect spark plug wires before cleaning, lubricating or doing any kind of work on lawn tractor.

STEERING GEARS

Lubricate teeth of steering gears with automotive multi-purpose grease after every 25 hours of operation or once a season. Refer to figure 21.

STEERING SHAFT

Lubricate steering shaft at least once a season with light oil.

HYDROSTATIC TRANSMISSION

The hydrostatic transmission is filled with approximately 60 ounces of API classification SH/CD 20W50 motor oil. Change the hydrostatic fluid and filter initially after 10 to 20 hours of operation, and every 200 hours of operation or once a year thereafter. Refer to Maintenance section.

LINKAGE

Once a season lubricate all the pivot points on the clutch, brake and lift linkage with SAE 30 engine oil.

FRONT WHEELS

The front wheels are provided with grease fittings. The rear wheels must be removed from the axle for lubrication. Lubricate at least once a season with automotive multi-purpose grease.

PIVOT POINTS

Lubricate all pivot points with light oil at least once a season.

BALL JOINTS

The ball joints and drag link ends are permanently lubricated.

MAINTENANCE



WARNING: Disconnect the spark plug wire and ground against the engine before performing any adjustments, repairs or maintenance.

TROUBLE SHOOTING

Refer to the chart on page 22 for trouble shooting engine problems.

HYDROSTATIC TRANSMISSION

The hydrostatic transmission is cooled by the oil, fan and fins. If the hydrostatic transmission runs hot, check to see if the fan is in operating condition and the fins are clean.

NOTE: DO NOT use high pressure water spray or steam to clean the hydrostatic transmission.

Hydrostatic Transmission Fluid and Filter

The hydrostatic transmission contains approximately 60 ounces of API classification SH/CD 20W50 motor oil. For operation in colder climates, 10W40 oil may be used. Also, a 15W50 synthetic engine oil would provide excellent all climate performance and extended time between oil changes. Use only filter part number HG-50037.

Change the hydrostatic transmission fluid and filter initially after 10 to 20 hours of operation, and every 200 hours of operation or once a year thereafter.

To change the hydrostatic transmission fluid and filter:

- Remove oil filter on left side of transaxle and drain oil.
- 2. Clean around filter base and install new oil filter. Order part number HG-50037.
- 3. Raise rear of tractor and remove right rear wheel by removing hub cap, cotter pin and flat washer.
- 4. Level tractor by blocking rear axle.
- 5. Using a 1/4" allen wrench, remove the oil level plug from right side of transaxle. See figure 23.

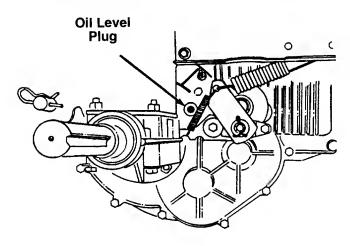


FIGURE 23.

- 6. Remove the transmission panel by removing the parking brake knob and truss machine screws.
- 7. Clean around filler hose (inside right frame) and bend hose upward. See figure 24.
- 8. Remove plastic vent from top of filler hose and insert a funnel. Fill transaxle with oil to the point of overflowing out of oil level hole.
- 9. Replace oil level plug and plastic vent.
- Start tractor and run for 1 minute. Recheck oil level. Add oil if necessary.
- 11. Reassemble in reverse order.
- 12. Remove the blocks from under rear axle and test the operation of the tractor.

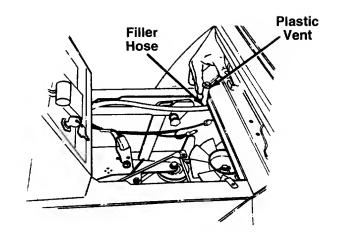


FIGURE 24.

CUTTING BLADES



WARNING: Protect hands by using heavy gloves or a rag to grasp the cutting blades.

The blades may be removed for sharpening or replacement as follows:

- 1. Remove the bolt and washer which holds the blade and adapter to the blade spindle. Remove the blade and adapter from the blade spindle.
- 2. **50" Decks only:** Remove the two bolts, lock washers and nuts holding the blade to the adapter. See figure 25A.

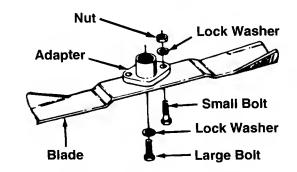


FIGURE 25A.—50" Deck

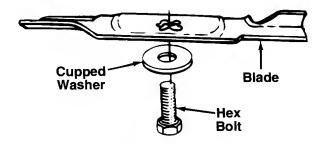


FIGURE 25B .--- 46" Deck

When sharpening the blades, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge be ground equally to prevent an unbalanced blade. An unbalanced blade vill cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested for balance by ba ancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

When replacing the blade, be sure to install he blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position.

TORQUE SPECIFICATIONS

46" Deck:

Blade

Center Bolt: 450 in. lb. min., 600 in. lb. max.

Blade Spindle Screws

If disassembled for any reason, tighten the blade spindle screws between 200 and 275 inch pounds.

50" Deck:

Blade

3/8" Dia. Bolt: 450 in. lb. min., 600 in. lb. max. 5/16" Dia. Bolt: 200 in. lb. min., 350 in. lb. max.

Blade Spindle Nuts

If disassembled for any reason, tighten the blade spindle nuts between 200 and 350 in. lbs.

To ensure safe operation of your unit, **all** nuts and bolts must be checked periodically for correct tightness.

ENGINE

Refer to the separate engine manual for al engine maintenance instructions.

Service **air cleaner** every 10 hours under normal conditions. Clean every few hours under extremely dusty conditions. To service the air cleaner, refer to the separate engine manual packed with your unit.

The **spark plugs** should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specifications.

Maintain engine oil as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.

FUEL FILTER

Your unit is equipped with a replaceable in- ine fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through your authorized engine service dealer.

CLEANING ENGINE AND DECK

Any fuel or oil spilled on the tractor should be wiped off promptly. Grass, leaves and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the deck after each mowing.

WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) require no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in, follow these steps.

- 1. Remove the hex nut and lock washer, and drop the end of the tie rod from the axle bracket. See figure 26.
- 2. Loosen the hex jam nut on tie rod.
- 3. Adjust the tie rod assembly for correct toe-in.

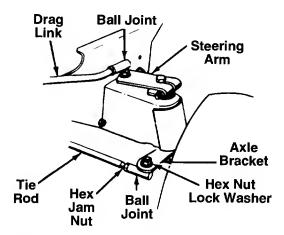


FIGURE 26.

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 27. To increase Dimension "B," screw tie rod into tie rod end. To decrease Dimension "B," unscrew tie rod from tie rod end. Reassemble tie rod. Check dimensions. Readjust if necessary.

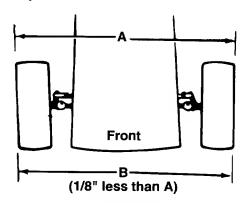


FIGURE 27.

DRAG LINK

If the drag link or ball joints are changed, the new assembly must be adjusted to the exact same length as the original. If adjusted incorrectly, it will allow the tractor to turn sharper one direction than the other.

To take off the drag link, remove the nuts and lock washers holding the ball joint to the steering gear and right front axle bracket. See figure 26.

BATTERY CARE AND MAINTENANCE CHECK FLUID LEVEL

Check fluid level inside each cell of the battery every two weeks and before and after charging. Always keep level just below the split rings.

Add only distilled water. Never add additional acid or any other chemicals to the battery after initial activation.

NOTE: After operating the lawn tractor for a long period of time, check the fluid level in the battery as it can overheat and lose fluid.

CHARGING THE BATTERY

The engine is equipped with an alternator which charges battery when tractor is operated. Under normal conditions, the battery only needs to be charged before, during and after off-season storage. Follow the instructions under "Off-Season Storage."

To charge the battery: Make certain fluid level in each cell is just below the split rings. Use a 12 volt automotive charger which is rated at 6 amps. Charge for a minimum of 3 hours and a maximum of 5 hours.

REMOVING / INSTALLING / JUMP STARTING



WARNING: When removing or installing the battery, follow these instructions to prevent the screwdriver from shorting against the frame.

Removing the Battery: Disconnect negative cable first, then positive cable.

Installing the Battery: Connect positive cable first, then negative cable.

Jump Starting

- 1. First, connect end of one jumper cable to the positive terminal of the good battery, then the other end to the positive terminal of the dead battery.
- Connect the other jumper cable to the negative terminal of the good battery, then to the FRAME OF THE UNIT WITH THE DEAD BATTERY.



WARNING: Failure to use this procedure could cause sparking, and the gas in either battery could explode.

CLEAN THE BATTERY

Clean the battery by removing it from the unit and washing with a baking soda and water solution. If necessary, scrape the battery terminals with a wire brush to remove deposits. Coat terminals and exposed wiring with grease or petroleum jelly to prevent corrosion.

BATTERY FAILURES

Some common causes for battery failure are: incorrect initial activation, lack of water, adding chemicals other than water after initial activation, undercharging, overcharging, corroded connections, freezing. **These failures do not constitute warranty.**

TIRES

Recommended operating tire pressure is approximately 12 p.s.i. Maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

When installing a tire to the rim, be certain rim is clean and free of rust. Lubricate both the tire and rim generously. Never inflate to over 30 p.s.i. to seat beads.



WARNING: Excessive pressure (over 30 p.s.i.) when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

BELT REPLACEMENT

DECK BELTS (See figure 28)

- Remove the deck from the tractor by following "Attaching the Deck" instructions in the Assembly section in reverse order. Refer to page 8.
- 2. Remove the left hand pulley cover by unhooking the spring and removing five self-tapping screws.
- 3. Remove the first drive belt.
- 4. Remove the right hand pulley cover by removing three self-tapping screws.
- 5. Pivot the spring-loaded idler, and lift belt off.
- 6. Remove the belt from around the three deck pulleys.
- 7. Reassemble new belts in reverse order.

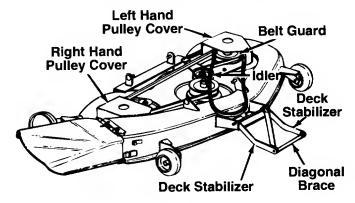


FIGURE 28.—46" Deck Shown

DRIVE BELT (See figure 29)

- 1. Depress the clutch pedal and set parking brake.
- 2. Remove the deck from the tractor by following "Attaching the Deck" instructions in the Assembly section in reverse order.
- 3. Raise and block the front wheels of the tractor so you can work under it.
- 4. Remove the four self-tapping screws which hold the belt keeper assembly to the frame at the engine pulley. Push the belt keeper assembly forward, out of the way. See figure 29.
- 5. Loosen the hex bolt which acts as a belt keeper by the front idler pulley.
- 6. Loosen the rear idler pulley. Remove the belt from around both idler pulleys.
- 7. Model 146Y834P only: Unplug the electric PTO.
- 8. Roll belt up off engine pulley, onto the pulley hub to obtain slack in the belt.
- 9. Remove belt from the transmission pulley, lifting the belt up over the fan on top of the pulley.
- 10. Remove belt from the engine pulley.

Reassemble using a new belt, following instructions in reverse order.

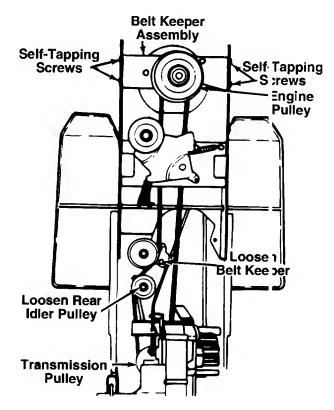


FIGURE 29.

OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

- 1. Clean the engine and the entire unit thoroughly.
- 2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
- Refer to the engine manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
- 4. Charge battery fully. The battery loses some of its charge each day when the unit is not used. NEVER store battery without a full charge. Recharge battery before returning to service or every two months, whichever occurs first.
- When storing unit for extended periods, disconnect battery cables. Removing battery from unit is recommended.
- 6. Store unit in a clean, dry area. Do not store next to corrosive materials, such as fertilizer.

NOTE: When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

OPTIONAL EQUIPMENT

At the time of manufacture of tractor, the following optional equipment is available.

Description	Model No.	
40" Single Stage Snow Thrower	OEM-190-832	
45" Two Stage Snow Thrower	OEM-190-831	
48" Dozer Blade	OEM-190-840	
Grass Collector for 46" Deck Only	OEM-190-083	
Tire Chains—23 x 9.5	OEM-190-964	
100 lb. Wheel Weights	190-784-000	
Sleeve Hitch Kit	OEM-190-929	
Electric Lift Kit	OEM-190-749	
Row Crop Cultivator	OEM-190-984	
28" PTO Driven Rear Mounted Tiller	OEM-190-756	
38" 8 HP Rear Mounted Tiller	OEM-190-766	
Single Disc Harrow	OEM-190-980	
10" Moldboard Plow	OEM-190-978	
Gang Reel (Set of three)	45-0195*	
38" Lawn Sweeper	45-0222*	
Heavy Duty Lawn Roller	45-0179*	
Heavy Duty Dump Cart	45-0171*	
Tine De-Thatcher	45-0186*	

^{*}Available through your local dealer or from Agri-Fab Inc., 303 W. Raymond Street, Sullivan, Illinois 61951.

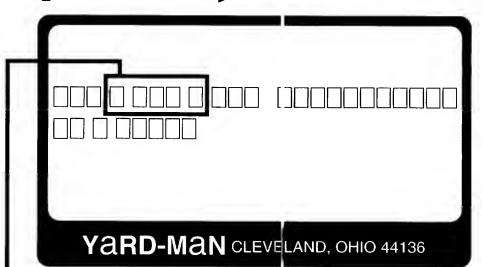
TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Engine will not crank	Safety switch button not depressed	There are two switches in the starting circuit of your unit: the clutch pedal switch and the deck lift lever switch. Make certain the actuator is fully depressing the buttons on each switch.
	Battery installed incorrectly	The battery r just be installed with negative terminal attached to black ground wire. Negative terminal is identified at the post by "NEG", "N" or "-". The positive terminal, identified by "POS", "P" or "+", must be attached to the big red wire which goes to the solenoid.
	Battery is dead or weak	Check fluid I evel in battery. If fluid is low, fill to just below split rings with water. Charge with 6 amp charger until ully charged.
	Blown fuse or circuit breaker	Replace fuse with automotive type fuse. Fuses seldom fail without a reason. The problem must be corrected. Cleck for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a mozing part.
	Engine ground wire loose	Engine shoul 1 have a black ground wire running from engine to frame or mounting bolt.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner s guide for correct position for throttle control and choke for starting.
	No spark to spark plug	Spark plug le ad disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engin 3. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body at ainst the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it coes not.
	No fuel to the carburetor	Gasoline tan . empty. Fill. Fuel line or ir -line fuel filter plugged. Remove and clean fuel line. Replace filter if necessary.
	Air filter dirty	If the air clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breat ier defective. Replace.
Excessive vibration	Bent or damaged blade spindle	Stop engine immediately. Check all pulleys, blade adapters, keys and bolts for tightness and damage. Tigl ten or replace any damaged parts.
	Bent blade	Stop engine immediately. Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Speed selection Blades short or dull	Throttle must be set at full throttle. Use lower ground speed. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

If the above steps fail to correct the problem, take the unit to your local authorized service dealer for repair.



Copy the information from your model plate here:



Please help you! Us Have your model number available when you call

Model No.	3834H	W834H	Y834P
Engine Oil (SAE 30)	737-0208	737-0208	737-0208
Ignition Key	725-1341B	725-1341B	725-1341B
Throttle Control Wire	746-0634	746-0630	746-0630
Battery (275 Cold Crank Amps)	725-1707	725-1707	725-0453C
Steering Wheel	631-0027	631-0027	631-0027
Steering Wheel Insert	731-0955	731-0955	731-0955
Front Wheel Bearing	741-0516 (4)	741-0516 (4)	741-0516 (4)
Hub Cap Front	734-1788	734-1788	734-1788
Hub Cap Rear	734-1789	734-1789	734-1789
Head Lamp Bulbs	725-0963 (2)	725-0963 (2)	725-0963 (2)
Drive Belt	754-0435	754-0435	754-0435
Upper Deck Belt	754-0350	754-0350	754-0291A
Lower Deck Belt	754-0349	754-0349	754-0364
Outer Blades	742-0542	742-0542	742-0171B
Center Blade	742-0543	742-0543	742-0171B
Illustrated Parts Lists	Order by Complete Model No.		

For Option al Equipment Available, Refer to Page 21.







For Parts, Accessories or Service Information,

CALL NOW! 1(800) 800-7310

8:00 AM to 8:00 PM Monday Through Saturday
12 Noon to 6:00 PM Sunday
Eastern Time: (winter hours may vary)

The only way to ensure the performance of your product is to use original equipment parts and accessories, which are designed and engineered to exacting specifications. When you substitute, you take a chance on quality, reliability, safety and performance. Use original equipment parts—See your local service dealer.



WARNING: The Engine Exh aust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.